

**UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF RECLAMATION**

**MID-PACIFIC REGION**

**SOUTH-CENTRAL CALIFORNIA AREA OFFICE  
FRESNO, CALIFORNIA**

**DRAFT FINDING OF NO SIGNIFICANT IMPACT**

**VISTA VERDE 5-YEAR TRANSFER OF SETTLEMENT CONTRACT WATER  
TO VISTA VERDE-OWNED LANDS  
WITHIN WESTLANDS WATER DISTRICT**

**FONSI-07-73**

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In accordance with section 102(2) (c) of the National Environmental Policy Act (NEPA) of 1969, as amended, the South-Central California Area Office of the U.S. Bureau of Reclamation (Reclamation), has determined that the approval of a five-year transfer of Settlement Contract water is not a major federal action that will significantly affect the quality of the human environment and an environmental impact statement is not required. This Finding of No Significant Impact is supported by Reclamation's Draft Environmental Assessment (EA) Number EA-07-73, *Vista Verde 5-year Transfer of Settlement Contract Water to Vista Verde-Owned Lands within Westlands Water District*, and is hereby incorporated by reference.

**BACKGROUND**

Reclamation proposes to approve a series of temporary annual water transfers. Vista Verde would transfer up to 1,140 acre feet per year of their Settlement Contract water supply, Contract Number 14-06-200-44448A, (Contract) for the next five years, beginning in 2007 to Vista Verde owned lands located entirely within Westlands Water District. The purpose of the proposed transfer is to provide a supplemental source of water for Vista Verde farmland within WWD adjacent to the San Luis Canal, to maintain higher value crops. The transfer is needed because of chronic water shortages that have occurred and are expected to continue to occur in WWD. The transfer of this Contract water would reduce the need for supplemental groundwater pumping in WWD.

**FINDINGS**

**Land Use:** There is the potential that low value crops in the Mendota area owned by Vista Verde will be taken out of production so that the water could be used for Vista Verde's high value crops in WWD. Fallowing of this land will be temporary. No new agricultural lands will be developed as a result of the transfer. All water delivered in this transfer will utilize existing facilities and be used to irrigate existing agricultural lands. No construction is required for this project. Therefore, there will be no significant impacts from land use as a result of the proposed action.

**Water Resources:** The water involved in this proposed transfer will be used to directly offset a like amount of groundwater pumping in WWD. The Proposed Action will not affect CVP operations and will not change existing diversion points. The transferred water will simply be conveyed by the San Luis Canal rather than the Delta Mendota Canal. Transfer of this water into WWD will reduce the need for groundwater pumping.

There will be no construction or modification of CVP facilities. The approval of the proposed action will not interfere with CVP obligations to deliver water to other contractors or fish and wildlife areas. Specifically, the transfer of CVP water will not have an adverse effect on unique geological features such as wetlands, wild or scenic rivers, refuges, flood plains, rivers placed on the nationwide river inventory, or prime or unique farmlands. No native, untitled lands will be cultivated by the use of this water. No additional groundwater will be pumped to make the transfer water available; thus, no groundwater substitution will occur. Therefore, there will be no significant impacts to water resources.

**Biological Resources:** The proposed action will not interfere with Reclamation's acquisition of water for refuges, as required by the CVPIA. No negative impacts to plants or wildlife are anticipated as no native, untitled lands will be irrigated or receive the transferred water. The water will be delivered to established croplands through existing canals. Lands that will be fallowed as a result of these transfers will be disked and/or rotated annually so that no lands revert back to uncultivated status.

The proposed transfers will not have any effect on the Mendota Wildlife Area. The Contract land that may be fallowed to make water available for transfer has historically been farmed with crops such as cotton and alfalfa. Therefore, there will be very little, if any, change in the amount of forage crops in the area that wildlife might use as occasional habitat.

No species listed or proposed to be listed as endangered or threatened will be affected. No critical habitat for any listed species is located within the proposed action area and therefore will not be affected. The water delivered to the lands in WWD will be used to irrigate existing agricultural lands that are already in cultivation. No new facilities will be required to bring the water to these locations, and no native or untitled lands will be brought into production by the Proposed Action. Orchards provide some habitat for the San Joaquin kit fox, but the habitat value is relatively small, and will not be affected by the Proposed Action.

As a result of the above factors, Reclamation has made a determination of no effect for the proposed action under the Endangered Species Act for all species expected to be within the action area.

**Cultural Resources:** The transfer and conveyance of CVP water will not harm any cultural resources. It will be conveyed in existing facilities and canals to established agricultural land. No excavation or construction is required to convey the water and no untitled land will be cultivated with this water. Consequently, the undertaking is not a type of activity with the potential to affect cultural resources eligible to the National Register of Historic Places.

**Indian Trust Assets:** There are no tribes possessing legal property interests held in trust by the United States in the water involved with this action, nor is there such a property interest in the lands designated to receive the water proposed in this action.

**Socioeconomic Resources:** Under the Proposed Action, CVP water will be re-distributed to balance out local deficiencies in water supply, reduce waste, and promote efficient irrigation of crops. The most productive farmland will remain in production. Since the proposed transfers will be conducted locally and on a year-to-year schedule, there will be no significant social or economic problems. Seasonal labor requirements will have very little change, and businesses that support agriculture will not be financially harmed. The transfers will allow more productive and labor-intensive land to remain in production, thereby continuing socio-economic conditions in the region.

**Environmental Justice:** There could be up to 400 acres of the Settlement Contract land fallowed each year under the Proposed Action, which represents less than one-tenth of one percent of the farmed acreage in WWD. As such, there will be an insignificant effect on agricultural production and employment within the service area. No revenue will be generated for the contractors from transfers of this water. The Proposed Action will not affect minority-disadvantaged populations.

**Cumulative Impacts:** Cumulative Effects are those actions of federal, state, local, and private entities that are reasonably foreseeable in the action area that have an incremental impact when added to other past and present actions. As previously stated, Vista Verde has transferred this amount of water through the same existing facilities since August 2000. There have been no significant impacts as a result of the previous transfers.

The temporary transfers will limit any cumulative impacts. Reclamation has determined that there will be no identifiable impacts to CVP operations from the proposed action.

# RECLAMATION

*Managing Water in the West*

**Draft Environmental Assessment**

## **Vista Verde 5-Year Transfer of Settlement Contract Water to Vista Verde-Owned Lands within Westland Water District**

**EA-07-73**



U.S. Department of the Interior  
Bureau of Reclamation  
Mid Pacific Region  
South Central California Area Office  
Fresno, California

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## List of Acronyms, Abbreviations and Definition of Terms

|             |   |
|-------------|---|
| AF          | acre-feet (the volume of water one foot deep and an acre in area) |
| CVP         | Central Valley Project  |
| CVPIA       | Central Valley Project Improvement Act                            |
| EA          | Environmental Assessment  |
| ESA         | Endangered Species Act  |
| FWCA        | Fish & Wildlife Coordination Act                                  |
| NEPA        | National Environmental Policy Act                                 |
| Reclamation | Bureau of Reclamation   |





# **Section 1 Purpose and Need for Action**

## **1.1 Background**

When the Bureau of Reclamation (Reclamation) initiated construction of the Central Valley Project (CVP), certain San Joaquin River water rights holders were offered “Settlement Contracts” which supplied a like amount of water from CVP facilities to replace water lost with the development of the CVP. Through these Settlement Contracts, the San Joaquin River water was exchanged for water that can be pumped from the Sacramento-San Joaquin Delta and delivered through CVP facilities. Reclamation delivers CVP water to the Mendota Pool as an adjustment and settlement of the asserted water rights claimed under the subject Settlement Contracts.

Vista Verde Farms (Vista Verde) is a settlement contractor - Contract Number 14-06-200-44448A (originally executed by Dudley and Indart) (Contract). Vista Verde has lands adjacent to the Westlands Water District (WWD) northeastern boundary and south of the city of Mendota which is the land designated to receive the contract water. Vista Verde also owns land located entirely within WWD (See Figure 1). Vista Verde has been making temporary annual transfers of their Contract water since 2001 in accordance with the appropriate environmental documentation and approvals to their lands located within WWD. Reclamation previously prepared an Environmental Assessment (EA) in 2000 for these temporary annual water transfers of Contract water to WWD by Vista Verde Farms that resulted in a Finding of No Significant Impact (FONSI #00-58) for temporary annual transfers between 2000 and 2004. Each year Vista Verde advised Reclamation of the proposed method of making the water available for transfer. In 2005, Reclamation approved FONSI #05-36 for the annual transfer of Contract water owned by Vista Verde for the 2005 year only.

This EA analyzes potential environmental affects from initiating a new series of temporary annual transfers that would occur during each of the next five years, similar to the transfers that occurred during 2001-2005 that have been used to supplement Vista Verde’s WWD contract supply (or that of its affiliates). Vista Verde did not transfer water under this program in 2000 or 2006.

## **1.2 Purpose and Need**

Reclamation proposes to approve a series of temporary annual water transfers. Vista Verde would transfer up to 1,140 acre feet per year of their Contract water supply under the above referenced contract for the next five years, beginning in 2007 to property farmed by Vista Verde or its affiliates located entirely within WWD. The transfer is needed because of chronic water shortages that have occurred and are expected to continue to occur in WWD. The purpose of the proposed transfer is to provide a supplemental source of water for Vista Verde property within WWD adjacent to the San Luis Canal, to maintain higher value crops. The transfer of this Contract water would reduce the need for supplemental groundwater pumping in WWD.

## 1.3 Potential Issues

Potentially affected resources in the project vicinity include:

- Land Use
- Water Resources
- Biological Resources
- Archaeological and Cultural Resources
- Indian Trusts Assets
- Environmental Justice
- Socioeconomic Resources

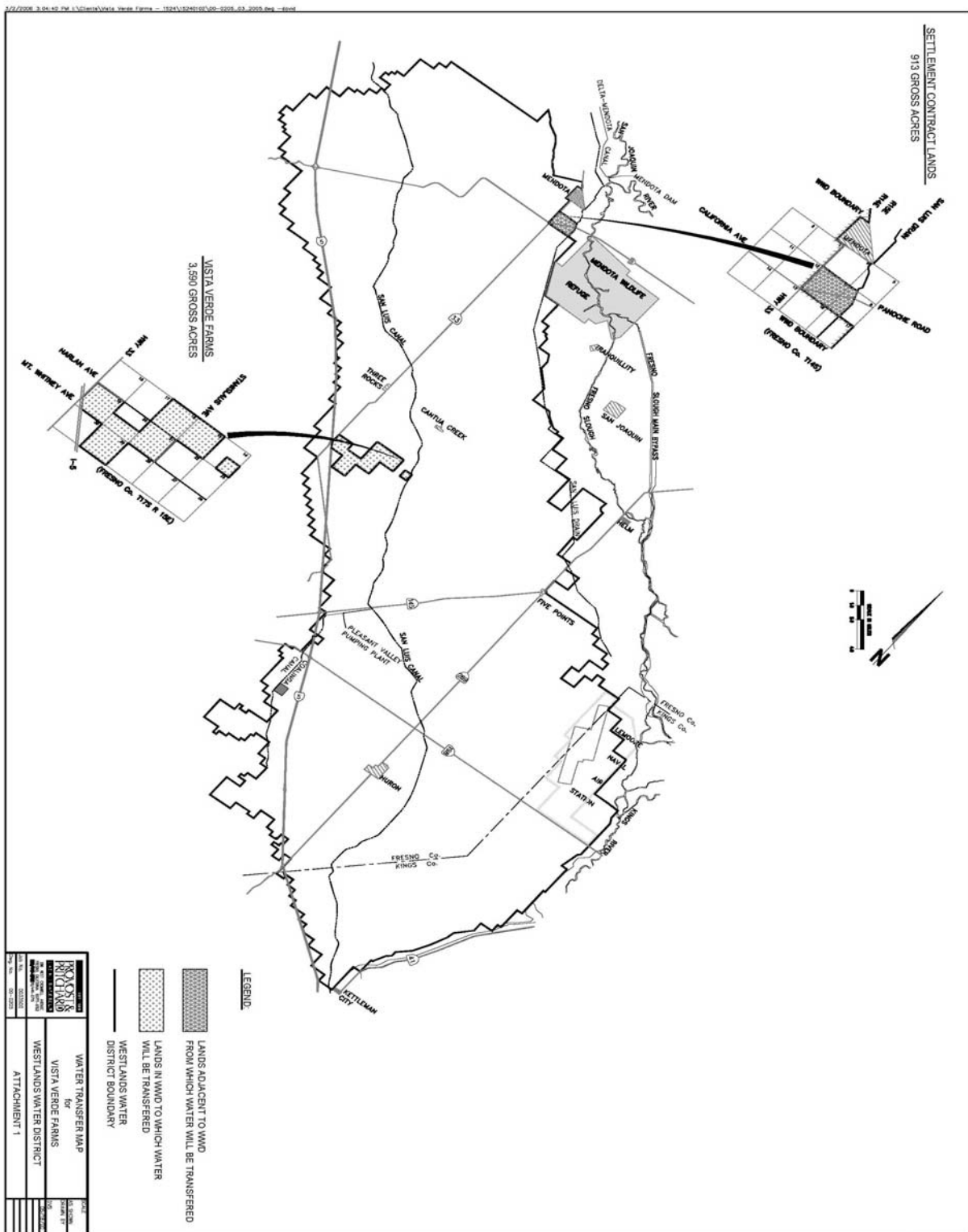


Figure 1: Vista Verde Lands

## **Section 2 Alternatives Including Proposed Action**

### **2.1 Alternative A – No Action**

Under the No-Action Alternative, the transfers would not take place. The Settlement Contract water would continue to be utilized on the Vista Verde property adjacent to WWD. Additional groundwater pumping on WWD lands farmed by Vista Verde or its affiliates would be required to supplement reduced CVP supplies.

### **2.2 Alternative B - Proposed Action**

The Proposed Action is an approval, by Reclamation, for a series of annual temporary water transfers during each of the next five years (2007 – 2011) for an annual volume up to 1,140 acre-feet of Settlement Contract water from the Settlement Contractor, Vista Verde, Contract Number 14-06-200-44448A (the Dudley and Indart Settlement Contract), to lands owned by Vista Verde within WWD.

The Contract water would be made available for transfer through land fallowing. The method of making the water available for transfer could vary each year during the five-year term covered by the environmental assessment, depending on certain fallowed crops. Reclamation would be informed of the fallowed crops and determine the amount of water made available by fallowing and ultimately approve the transfer each year based on this method.

The lands served by the Contract are near Mendota, adjacent to WWD and adjacent to the Mendota Pool. The lands to receive the transfer water are all within WWD. All lands are within the CVP service area. The property from which the water would be transferred and the property that would receive the transferred water are both within Fresno County.

The water involved in this proposed transfer originates from Vista Verde's Contract and is already being delivered south of the Delta to the San Luis Reservoir for delivery to the Contract lands via the Delta Mendota Canal. Under the proposed action, a portion of the Contract CVP water would be delivered to the Vista Verde land in WWD via the San Luis Canal as was done in 2001 – 2005. The proposed action would require only changing the means of conveyance of a portion of the Contract CVP supply from the Delta-Mendota Canal to the San Luis Canal. No additional water would be exported from the Delta and the water would continue to be delivered on an agricultural delivery schedule, so there would be no impact on Delta pumping. All water delivered in this transfer would utilize existing facilities and be used to irrigate existing agricultural lands. No construction is required for this project.

### **2.3 Alternatives Considered but Eliminated from Further Analysis**

A theoretical alternative might be for Vista Verde Farms to continue to use the Contract water on the Mendota area property and to acquire alternative surface supplies from another source to help meet the water deficit on their lands within WWD. Since an alternative source of surface water

has not been identified, it would be speculative at this time to discuss potential impacts, except for the economic impacts that could result from having to purchase supplemental water rather than beneficially utilizing the water that Vista Verde already owns. Therefore, this Environmental Assessment will only address the Proposed Action and the No-Action Alternative.

## **Section 3    Affected Environment & Environmental Consequences**

### **3.1    Land Use**

#### **3.1.1    Affected Environment**

Much of the Contract land in the Mendota area owned by Vista Verde Farms has historically been planted to lower value crops such as cotton, alfalfa and small grains. The Vista Verde owned lands in WWD in recent years has been planted with high value crops such as young pistachios as well as historically planted with almonds, fruits and vegetables.

#### **3.1.2    Environmental Consequences**

##### No Action

Under the No-Action Alternative, there is the likelihood that some highly productive land in WWD may be taken out of production or groundwater would need to be pumped within WWD to meet water shortages that are occurring and that would be expected to continue to occur in the future.

##### Proposed Action

Under the Proposed Action, there is the potential that low value crops in the Mendota area farmed by Vista Verde would be taken out of production so that the water could be used for Vista Verde's high value crops in WWD. Fallowing of this land would be temporary. No new agricultural lands would be developed as a result of the transfer.

### **3.2    Water Resources**

#### **3.2.1    Affected Environment**

The amount of water available each year for CVP contractors is based on the storage of winter precipitation and control of spring runoff. The allocation of water to CVP contractors is determined by state water rights permits, judicial decisions, and state/federal obligations to maintain water quality, enhance environmental conditions, and prevent flooding. Shortages of water supplies occur annually.

Within the WWD, water supplies are almost exclusively obtained through a contract with Reclamation for project water supplies through the CVP. Project water is used for reasonable and beneficial purposes but is generally not sufficient for all needs. In districts without sufficient surface water, such as WWD, groundwater has often been pumped, which can cause overdraft conditions and subsidence. Shallow aquifers can be impacted by irrigation runoff, pesticides, and soluble, naturally occurring trace elements like selenium, boron, and arsenic.

To allow land within the WWD to stay in agricultural production with the reduced CVP contract supplies, groundwater pumping has been employed to help meet the irrigation requirements along with annual supplemental water transfers when available.

Vista Verde owns one-half of the Contract (Number 14-06-200-44448A), which is for a total amount of 2,280 acre-feet. The Contract identifies monthly amounts of water that are available as shown below:

| <b>Settlement Contract Number 14-06-200-4448A</b> |  |   |
|---|--|---|
| <b>Month</b>                                      | <b>Dudley &amp; Indart<br/>Settlement Contract<br/>(acre-feet)</b> | <b>Vista Verde Farms<br/>Water Supply<br/>(acre-feet)</b> |
| January   | 0  | 0   |
| February  | 195  | 97  |
| March   | 313  | 157   |
| April   | 277  | 138   |
| May   | 339  | 170   |
| June  | 423  | 211   |
| July  | 489  | 245   |
| August  | 218  | 109   |
| September   | 26   | 13  |
| October   | 0  | 0   |
| November  | 0  | 0   |
| December  | 0  | 0   |
| <b>Total</b>                                      | <b>2,280</b>   | <b>1,140</b>  |

Note: Vista Verde's share is 1/2 of Settlement Contract amount.

The total amount of settlement water is split equally between the two partners that receive water under the Contract, with each being entitled to 1,140 acre-feet per year. The amount of water used by each partner in any given month can be more or less than 50% of that month's allocation, as long as the total amount used is equal between the two partners. The partners have agreed to cooperatively work together to utilize the available water supply and allow Vista Verde to transfer up to 1,140 acre-feet each year to lands in WWD adjacent from the San Luis Canal.

### **3.2.2 Environmental Consequences**

#### No Action

The No-Action Alternative would result in this water being delivered to less productive land and to lower value crops. This could cause local deficiencies for the higher productive land in WWD. Other supplies could be utilized for an alternative supply, but these would involve purchase and exchange from other areas or involve additional groundwater pumping.

In order to meet their crop irrigation requirements within the WWD, the farming entity would probably use more groundwater, if available. However, across most of the area, many aquifers are over-drafted, and impacted by saline groundwater and trace elements. Many are too deep to be economically pumped. Utilization of alternative supplies allows groundwater supplies to be conjunctively used.

#### Proposed Action



The water involved in this proposed transfer would be used to directly offset a like amount of groundwater pumping in WWD. The Proposed Action would not affect CVP operations and would not change existing diversion points. Up to 1,140 of the transferred water would simply be conveyed via the San Luis Canal rather than the Delta Mendota Canal. Transfer of this water into WWD would reduce the need for groundwater pumping.

There would be no construction or modification of CVP facilities. The approval of the proposed action would not interfere with CVP obligations to deliver water to other contractors or fish and wildlife areas. Specifically, the transfer of CVP water would not have an adverse effect on unique geological features such as wetlands, wild or scenic rivers, refuges, flood plains, rivers placed on the nationwide river inventory, or prime or unique farmlands. No native, untilled lands would be cultivated by the use of this water.

The amount of land fallowed each year to make water available for these transfers would be determined on the evapotranspiration of applied water (ETAW) of the crops grown on the Mendota area property, and does not take into account deep percolation of applied water or rainfall. Therefore, no changes in groundwater resources in the vicinity of the Mendota Wildlife Area are anticipated as a result of the proposed transfers.

The surface water available from the Contract has historically made up approximately 40 percent of the average annual water use of the Contract land. Vista Verde Farms has historically relied on alternative water sources, principally groundwater, to supply the remaining 60 percent of the annual water use. After the transfers, groundwater pumping for the Settlement Contract land would continue along historical trends. No additional groundwater would be pumped to make the transfer water available; thus, no groundwater substitution would occur.

### **3.3 Biological Resources**

#### **3.3.1 Affected Environment**

The environmental setting is restricted to the Vista Verde land within WWD and the Mendota area property, which is located approximately one mile west of the northwestern boundary of the Mendota Wildlife Area. Other surrounding areas, foothills and adjacent mountain areas are not included in this analysis. Since the Mendota area property is adjacent to WWD and is in agricultural production similar to the WWD land, this analysis focuses on general biological resources in WWD, which can be applicable to both the Contract land and the Vista Verde land in WWD adjacent from the San Luis Canal. The conveyance facilities to be used in the Proposed Action are not managed for fisheries. Some non-native warm-water fish may inhabit the canals. No sensitive or status fish species occur in the conveyance facilities that would be used in the project.

Biological resources in WWD are similar to those biological resources found in agricultural areas of Fresno, Kings, Madera and Merced Counties. The habitats are dominated by agricultural habitats. The cultivated areas include field crops, orchards, and pasture. The vegetation includes the crops and frequently includes weedy non-native annual and biennial plants. Common purslane (*Portulaca oleracea*), London rocket (*Sisymbrium irio*), field bindweed (*Convolvulus arvensis*), and barnyard grass (*Echinochloa crusgalli*) occur in irrigated fields. Turkey mullein (*Eremocarpus setigerus*), puncture vine (*Tribulus terrestris*), telegraph weed (*Heterotheca grandiflora*), and Canada horseweed (*Conyza canadensis*) occur along roads and in fallowed

fields. Ripgut grass (*Bromus diandrus*), wild oats (*Avena fatua*), and common fiddleneck (*Amsinckia intermedia*) are among the species that occur in orchard lands. Kentucky fescue (*Festuca arundinacea*), dallisgrass (*Paspalum dilatatum*), perennial ryegrass (*Lolium perenne*), bermuda grass (*Cynodon dactylon*), white clover (*Trifolium repens*), bull thistle (*Cirsium vulgare*), spiny clotbur (*Xanthium spinosum*), cocklebur (*Xanthium strumarium*), and pacific rush (*Juncus effusus*) occur in pasturelands.

These types of vegetation support various species of birds that may occur in the cultivated areas, such as Brewer's blackbird (*Euphagus cyanocephalus*), red-wing blackbird (*Agelaius phoeniceus*), tricolored blackbird (*Agelaius tricolor*), mourning dove (*Zenaidura macroura*), American crow (*Corvus brachyrhynchos*), yellow-billed magpie (*Pica nuttalli*), white-crowned sparrow (*Zonotrichia leucophrys*), American robin (*Turdus migratorius*), western kingbird (*Tyrannus verticalis*), and American pipit (*Anthus spinoletta*). Other wildlife that are supported by this type of vegetation include the house mouse (*Mus musculus*), deer mouse (*Peromyscus maniculatus*), California vole (*Microtus californicus*), Botta's pocket gopher (*Thomomys bottae*), gopher snake (*Pituophis melanoleucus*), king snake (*Lampropeltis getulus*), western fence lizard (*Sceloporus occidentalis*), red tail hawk (*Buteo jamaicensis*), Swainson's hawk (*Buteo swainsoni*), and coyote (*Canis latrans*). Near the rivers and canals with water and some vegetation, great blue heron (*Ardea herodias*), great egret (*Casmerodias albus*), and white-faced ibis (*Plegadis chihi*) occur, especially near the San Joaquin River.

Alkali desert scrub occurs in some areas with alkaline soils and seasonally perched water over a shallow claypan. The vegetation in these areas include iodine bush (*Allenrofea occidentalis*), bush seepweed (*Suaeda moquinii*), allscale (*Atriplex polycarpa*), five-hook (*Bassia hyssopifolia*), fat hen (*Atriplex patula*), valley sacaton (*Sporobolus airoides*), salt grass (*Distichlis spicata*), saltmarsh sandspurrey (*Spergularia marina*), and veiny pepper-grass (*Lepidium dictyotum*). The wildlife species include western spadefoot (*Scaphiopus hammondi*), blunt-nosed leopard lizard (*Gambelia silus*), San Joaquin whipsnake (*Masticophis flagellum ruddocki*), burrowing owl (*Speotyto cunicularia*), San Joaquin kit fox (*Vulpes macrotis mutica*), and Fresno kangaroo rat (*Dipodomys nitratoideus exilis*).

The following was obtained on June 20, 2007, by accessing the U.S. Fish and Wildlife Database: [http://www.fws.gov/pacific/sacramento/es/spp\\_lists/auto\\_list.cfm](http://www.fws.gov/pacific/sacramento/es/spp_lists/auto_list.cfm). The list is for the following 7 ½ minute U.S. Geological Survey quadrangles, which are overlapped by Vista Verde Settlement lands near Mendota and the Vista Verde lands within WWD: Tres Pecos Farms (338A), Lillis Ranch (338B), Tranquility (360A) and Mendota Dam (381D). Federally listed or special status species that could occur within this area include giant kangaroo rat (*Dipodomys ingens*), Fresno kangaroo rat (*Dipodomys nitratoideus exilis*), San Joaquin kit fox (*Vulpes macrotis mutica*), Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), Vernal pool fairy shrimp (*Brachinecta lynchi*), bald eagle (*Haliaeetus leucocephalus*), California tiger salamander (*Ambystoma californiense*), California Red-legged frog (*Rana aurora draytonii*), blunt-nosed leopard lizard (*Gambelia sila*), giant garter snake (*Thamnophis gigas*) and palmate-bracted bird's beak (*Cordylanthus palmatus*) (FWS, 2007).

### 3.3.2 Environmental Consequences

#### No Action

Under the No-Action Alternative, the Settlement Contract water would continue to be delivered to the Mendota area lands. There would be no impacts to wildlife and special status species, as

no new facilities would be constructed and deliveries would operate as was intended by the Contract. The conditions of special status wildlife species and habitats under the No Action Alternative would be the same as they would be under existing conditions described in the Affected Environment; therefore, no additional effects to special status species or critical habitats are associated with this alternative.

#### Proposed Action

The proposed action would not interfere with Reclamation's acquisition of water for refuges, as required by the CVPIA.

Under the Proposed Action, no negative impacts to plants or wildlife are anticipated as no native, untilled lands would be irrigated or receive the transferred water. The water would be delivered to established croplands through existing canals. Lands that may be fallowed as a result of these transfers would be disked and/or rotated annually so that no lands revert back to uncultivated status.

The proposed transfers would not have any effect on the Mendota Wildlife Area. The Settlement Contract land that may be fallowed to make water available for transfer has historically been farmed with crops such as cotton and alfalfa. Therefore, there would be very little, if any, change in the amount of forage crops in the area that wildlife might use as occasional habitat.

No species listed or proposed to be listed as endangered or threatened would be affected. No critical habitat for any listed species is located within the proposed action area and therefore would not be affected. The water delivered to the lands in WWD would be used to irrigate existing agricultural lands that are already in cultivation. No new facilities would be required to bring the water to these locations, and no native or untilled lands would be brought into production by the Proposed Action. Orchards provide some habitat for the San Joaquin kit fox, but the habitat value is relatively small, and would not be affected by the Proposed Action. Within WWD boundaries, there are a number of records shown by the California Natural Diversity Database (CNDDB) for species listed under the Endangered Species Act. None of these records, however, are within the boundaries of the lands to which the water would be applied.

As a result of the above factors, Reclamation has made a determination of no-effect for the proposed action under the Endangered Species Act for all species expected to be within the action area.

### **3.4 Archaeological and Cultural Resources**

#### **3.4.1 Affected Environment**

Cultural Resources is a broad term that includes prehistoric, historic, architectural, and traditional cultural properties. The San Joaquin Valley is rich in historical and pre-historic cultural resources. Cultural resources in this area are generally prehistoric in nature and include remnants of native human populations that existed before European settlement. Prior to the 18th Century, many Native American tribes inhabited the Central Valley. It is possible that many cultural resources lie undiscovered across the valley. However, a systematic inventory for cultural resources on the farmers' lands in WWD and Vista Verde Farms has not been conducted, and prehistoric and historic resources may be present on these lands. The lands have

historically been cultivated for agricultural purposes and have been routinely tilled and irrigated. Any archaeological resources that may be present have likely been impacted by these agricultural practices.

The CVP is being evaluated for the National Register of Historic Places (NRHP). Facilities include the Delta-Mendota Canal.

The Delta-Mendota Canal, completed in 1951, carries water southeasterly from the Tracy Pumping Plant along the west side of the San Joaquin Valley for irrigation supply, for use in the San Luis Unit, and to replace San Joaquin River water stored at Friant Dam and used in the Friant-Kern and Madera systems. The canal is about 117 miles long and terminates at the Mendota Pool, about 30 miles west of Fresno (Reclamation, 2007).

In the WWD area, the San Joaquin Valley supported extensive populations of Native Americans, principally the Northern Valley Yokuts, in the prehistoric period. After Spanish and Mexican incursions in the early 19th century, coupled with the introduction of European-born epidemics, Native American populations declined and became culturally extinct in the San Joaquin Valley by the mid-19th century. The extent of cultural studies in the San Joaquin Valley is limited. The reclamation of land and intensive farming practices over the last century has probably destroyed many Native American occupation sites.

### **3.4.2 Environmental Consequences**

#### No Action

Under the No-Action Alternative, CVP water would continue to be conveyed to contractors in existing canals and would not affect cultural resources.

#### Proposed Action

The transfer and conveyance of CVP water would not harm any cultural resources. It would be conveyed in existing facilities and canals to established agricultural land. No excavation or construction is required to convey the water and no untilled land would be cultivated with this water. Consequently, the undertaking is not a type of activity with the potential to affect cultural resources eligible to the NRHP.

## **3.5 Indian Trust Assets**

### **3.5.1 Affected Environment**

Indian trust assets (ITAs) are legal interests in assets that are held in trust by the U.S. Government for federally recognized Indian tribes or individual Indians. The trust relationship usually stems from a treaty, executive order, or act of Congress. The Secretary of the Interior is the trustee for the United States on behalf of federally recognized Indian tribes. “Assets” are anything owned that holds monetary value. “Legal interests” means there is a property interest for which there is a legal remedy, such a compensation or injunction, if there is improper interference. Assets can be real property, physical assets, or intangible property rights, such as a lease, or right to use something. ITAs cannot be sold, leased or otherwise alienated without United States’ approval. ITAs may include lands, minerals, and natural resources, as well as hunting, fishing, and water rights. Indian reservations, rancherias, and public domain allotments

are examples of lands that are often considered trust assets. In some cases, ITAs may be located off trust land.

Reclamation shares the Indian trust responsibility with all other agencies of the Executive Branch to protect and maintain ITAs reserved by Indian tribes, or individual Indians by treaty, statute, or Executive Order.

### **3.5.2 Environmental Consequences**

#### No Action

No changes in Indian Trust Assets would occur under the No-Action Alternative since Indian Trust Assets are not known to exist within the service area.

#### Proposed Action

There are no tribes possessing legal property interests held in trust by the United States in the water involved with this action, nor is there such a property interest in the lands designated to receive the water proposed in this action.

## **3.6 Socioeconomic Resources**

### **3.6.1 Affected Environment**

The socioeconomic setting is dependant upon population, employment, housing, and revenues earned by the primary private employers. As stated earlier, WWD is comprised primarily of irrigated agricultural lands. There are many communities across the area where farm workers reside. There are many small businesses that support agriculture such as feed and fertilizer sales, machinery sales and service, pesticide applicators, transport, packaging, and marketing.

### **3.6.2 Environmental Consequences**

#### No Action

Under the No-Action Alternative, the lack of flexibility to transfer water could be problematic for farms and businesses and there could be a negative impact on socio-economic conditions by keeping lower value land in production and possibly allowing more productive land to be idle depending on future water supplies.

#### Proposed Action

Under the Proposed Action, CVP water would be re-distributed to balance out local deficiencies in water supply, reduce waste, and promote efficient irrigation of crops. The most productive farmland would remain in production. Since the proposed transfers would be conducted locally and on a year-to-year schedule, there would be no social or economic problems. Seasonal labor requirements would have very little change, and businesses that support agriculture would not be financially harmed. The transfers would allow more productive and labor-intensive land to remain in production, thereby continuing socio-economic conditions in the region.

## **3.7 Environmental Justice**

### **3.7.1 Affected Environment**

Executive Order 12898 (February 11, 1994) requires federal agencies to ensure that their actions do not disproportionately impact minority and disadvantaged populations.

The market for seasonal workers on local farms draws many thousands of migrant workers, commonly of Hispanic heritage from Mexico and Central America. The population of some small communities, like Mendota, typically increases temporarily during the late summer harvest season.

### **3.7.2 Environmental Consequences**

#### **No Action**

The No-Action Alternative would not affect minority disadvantaged populations, with the possible exception that if the transfer does not occur, land in the Mendota area that supports lower value crops would remain in production while the more productive land within WWD may or may not be planted depending on future water supplies, which could slightly affect employment opportunities.

#### **Proposed Action**

There could be up to 400 acres of the Settlement Contract land fallowed each year under the Proposed Action, which represents less than one-tenth of one percent of the farmed acreage in WWD. As such, there would be an insignificant effect on agricultural production and employment within the service area. No revenue would be generated for the contractors from transfers of this water. The Proposed Action would not affect minority-disadvantaged populations.

## **3.8 Cumulative Impacts**

Cumulative Effects are those actions of federal, state, local, and private entities that are reasonably foreseeable in the action area that have an incremental impact when added to other past and present actions. As previously stated, Vista Verde has transferred this amount of water through the same existing facilities since August 2000. There have been no significant impacts as a result of the previous transfers.

The temporary transfers would limit any cumulative impacts. Reclamation has determined that there would be no identifiable impacts to CVP operations from the proposed action.

## **Section 4 Consultation and Coordination**

### **4.1 Fish and Wildlife Coordination Act (16 USC 651 et seq.)**

The Fish and Wildlife Coordination Act requires that Reclamation consult with fish and wildlife agencies (federal and state) on all water development projects that could affect biological resources. The implementation of the CVPIA, of which this action is a part, has been jointly analyzed by Reclamation and the FWS and is being jointly implemented. The Proposed Action does not involve construction projects. Therefore the FWCA does not apply.

## **4.2 Endangered Species Act (16 USC 1521 et seq.)**

Section 7 of the Endangered Species Act requires Federal agencies, in consultation with the Secretary of the Interior, to ensure that their actions do not jeopardize the continued existence of endangered or threatened species, or result in the destruction or adverse modification of the critical habitat of these species.

The Proposed Action would support existing uses and conditions. No native lands would be converted or cultivated with CVP water. The water would be delivered to existing agricultural lands, through existing facilities, as has been done in the past, and would not be used for land conversion. Therefore, the Proposed Action would have no effect on federally listed threatened or endangered species or their designated habitats.

## **4.3 National Historic Preservation Act (15 USC 470 et seq.)**

Section 106 of the National Historic Preservation Act requires federal agencies to evaluate the effects of federal undertakings on historical, archaeological and cultural resources. The undertaking is not a type of activity with the potential to affect cultural resources eligible to the NRHP, therefore no further compliance actions are required.

## **4.4 Migratory Bird Treaty Act (16 USC Sec. 703 et seq.)**

The Migratory Bird Treaty Act implements various treaties and conventions between the U.S. and Canada, Japan, Mexico and the former Soviet Union for the protection of migratory birds. Unless permitted by regulations, the Act provides that it is unlawful to pursue, hunt, take, capture or kill; attempt to take, capture or kill; possess, offer to or sell, barter, purchase, deliver or cause to be shipped, exported, imported, transported, carried or received any migratory bird, part, nest, egg or product, manufactured or not. Subject to limitations in the Act, the Secretary of the Interior (Secretary) may adopt regulations determining the extent to which, if at all, hunting, taking, capturing, killing, possessing, selling, purchasing, shipping, transporting or exporting of any migratory bird, part, nest or egg would be allowed, having regard for temperature zones, distribution, abundance, economic value, breeding habits and migratory flight patterns.

The Proposed Action would have no effect on birds protected by the Migratory Bird Treaty Act.

## **4.5 Executive Order 11988 – Floodplain Management and Executive Order 11990-Protection of Wetlands**

Executive Order 11988 requires Federal agencies to prepare floodplain assessments for actions located within or affecting flood plains, and similarly, Executive Order 11990 places similar requirements for actions in wetlands. The project would not affect either concern.

# **Section 5 List of Preparers and Reviewers**

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## Section 6 References

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